MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2022/2023 (TERM ID 2210 & TERM ID 2215)

BEC1034 – MICROECONOMICS

(All sections / Groups)

18 FEBRUARY 2023
9.00 a.m – 11.00 a.m
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This Question paper consists of 10 pages with 2 sections:
   Section 1: FORTY (40) multiple choice; and
   Section 2: THREE (3) structure questions only.

2. Attempt **ALL** questions. All questions carry equal marks and the distribution of the marks for each question is given.

3. Please write all your answers in the Answer Booklet provided.

SECTION 1: MULTIPLE CHOICE QUESTIONS

1. In the short run, which of the following costs must continuously decrease as output produced increases?
   A. Total variable cost
   B. Total fixed cost
   C. Average variable cost
   D. Average fixed cost

2. In which of the following market structures do firms recognize their mutual interdependence?
   A. Oligopoly
   B. Monopoly
   C. Perfect competition
   D. Monopolistic competition

3. Assume that a profit-maximizing firm is perfectly competitive in both the output and the factor markets and is at its long-run equilibrium. The firm's output is 100 units, its total revenue is $600, and the fixed cost of production is $50. Based on this information, which of the following is true for the firm?
   A. Its marginal cost is $5.50, and its average total cost is $5.50.
   B. Its marginal cost is $5.50, and its average variable cost is $5.50
   C. Its marginal cost is $6, and its average total cost is $5.50.
   D. Its marginal cost is $6, and its average variable cost is $5.50.

4. At a firm's current rate of output, the marginal cost is $65, the average variable cost is $35, the average fixed cost is $30, and the product price is $65. Which of the following statements is true for the firm?
   A. Economic profits are zero because marginal revenue equals marginal cost.
   B. Economic profits are negative because total revenue is less than total cost.
   C. Economic profits are zero because price equals average total cost.
   D. Economic profits are positive because total revenue is greater than total cost.

5. Which of the following best describes an oligopolistic market?
   A. Many sellers with identical products and no barriers to entry.
   B. Many sellers, each with a clearly differentiated product, and no barriers to entry.
   C. A few competing sellers with similar products and high barriers to entry.
   D. A few competing sellers with significant barrier to entry.

6. Most economists argue that a monopoly is inefficient because it _____.
   A. produces too little output and sets a price above marginal cost
   B. has no incentive to minimize its costs
   C. earns too much profit by charging consumers any price it wants
   D. produces too much output and thus wastes scarce resources

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7. In order to minimize short-run losses, a profit-maximizing firm will necessarily shut down production under which of the following conditions?
   A. Total revenue is less than total cost.
   B. Marginal cost is greater than average total cost.
   C. Average revenue is less than average variable cost.
   D. Average revenue is less than average total cost.

8. If a firm's production process exhibits economies of scale, which of the following will occur when the firm's output increases?
   A. Its short-run average total costs will rise.
   B. Its short-run average total costs will fall.
   C. Its long-run average total costs will rise.
   D. Its long-run average total costs will fall.

9. In monopolistic competition, which of the following most accurately describes the long-run equilibrium conditions for a firm?
   A. P > ATC, MR = MC, and P > MC.
   B. P > ATC, MR > MC, and P = MC.
   C. P = ATC, MR = MC, and P > MC.
   D. P = ATC, MR > MC, and P > MC.

10. A monopolistically competitive firm advertise in order to _____.
   A. shift the demand curve for its product to the left
   B. make the demand for its product less price elastic
   C. make its product more similar to its competitors'
   D. reduce the industry's barriers to entry

11. Which of the following is a variable cost in the short run?
   A. Rent on the factory.
   B. Wages paid to factory labor.
   C. Interest payments on borrowed financial capital.
   D. Payment on the lease for factory equipment.

12. Which of the following statements is true?
   A. All costs are fixed in the short run.
   B. All costs are variable in the long run.
   C. All costs are variable in the short run.
   D. All costs are fixed in the long run.

13. When marginal costs are below average total cost, _____.
   A. average fixed costs are rising
   B. average total costs are falling
   C. average total costs are rising
   D. average total costs are minimized

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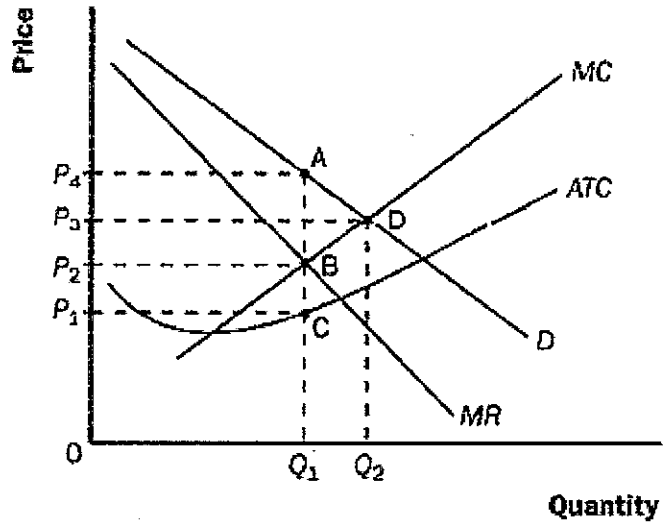
14. For a competitive firm, marginal revenue is _____.
    A. total revenue divided by the quantity sold
    B. equal to the quantity of the good sold
    C. average revenue divided by the quantity sold
    D. equal to the price of the good sold.

15. Which of the following is not a characteristic of a competitive market?
    A. There are many buyers and sellers in the market.
    B. The goods offered for sale are largely the same.
    C. Firms generate small but positive economic profits in the long run.
    D. Firms can freely enter or exit the market.

16. Which of the following is not a barrier to entry in a monopolized market?
    A. A single firm is very large.
    B. The government gives a single firm the exclusive right to produce some good.
    C. The costs of production make a single producer more efficient than a large number of producers.
    D. A key resource is owned by a single firm.

17. Figure 1



Refer to Figure 1. The profit-maximizing monopolist will choose the price and quantity represented by point _____.
    A. A
    B. B
    C. C
    D. D

Continued .....

18. Refer to Figure 1. The efficient price and quantity are represented by point _____.
    A. D
    B. A
    C. B
    D. C

19. Compared to a perfectly competitive market, a monopoly market will usually generate _____.
    A. higher prices and lower output
    B. higher prices and higher output
    C. lower prices and lower output
    D. lower prices and higher output

20. Which of the follow statements about price discrimination is not true?
    A. Perfect price discrimination generates a deadweight loss.
    B. Price discrimination not allow arbitrage sales.
    C. Price discrimination requires that the seller to be able to separate buyers according to their willingness to pay.
    D. Price discrimination increases a monopolist's profits.

21. If marginal revenue exceeds marginal cost, a monopolist should _____.
    A. increase output
    B. decrease output
    C. keep output the same because profits are maximized when marginal revenue exceeds marginal cost
    D. raise the price

22. When a firm operates with excess capacity _____.
    A. it must be a perfectly competitive firm
    B. it must be a monopolistically competitive firm
    C. additional production would increase the average total cost
    D. additional production would lower the average total cost

23. If, as the industry expands, a competitive industry can supply larger quantities at the same long-run market price, it is _____.
    A. a decreasing-cost industry
    B. a fixed-cost industry
    C. an increasing-cost industry
    D. a constant-cost industry

24. If marginal cost equal average total cost, _____.
    A. average total costs are falling
    B. average total costs are rising
    C. average total costs are maximized
    D. average total costs are minimized

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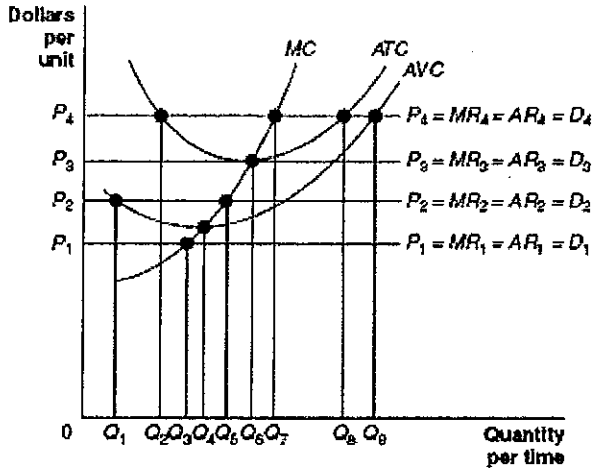
25. Figure 2



Refer to Figure 2. At price P_1, the firm would produce _____.

A. zero
B. Q_3
C. Q_5
D. Q_6

26. Refer to Figure 2. At price P_2, the firm would produce _____.

A. Q_6
B. zero
C. Q_5
D. Q_1

27. Refer to Figure 2. At price P_1, the firm would _____.

A. break even
B. lose more than fixed costs
C. lose less than fixed costs
D. lose fixed costs

28. Refer to Figure 2. At price P_3, the firm would _____.

A. suffer a loss equal to fixed costs
B. make a profit
C. break even
D. suffer a loss less than fixed costs

29. Refer to Figure 2. At price P_4, the firms in the industry would _____ in the long run.

A. have shut down
B. have exit
C. have entry
D. remain the same size

Continued .....

30. Refer to Figure 2. At price P_2, the firms in the industry would _____ in the long run.
    A. have shut down
    B. have exit
    C. have entry
    D. remain the same size

31. Table 1

Number of Workers	Output
0	0
1	23
2	40
3	50

Refer to Table 1. The marginal product of labor as production moves from employing one worker to employing two workers is _____.
    A. 0
    B. 10
    C. 17
    D. 23

32. Refer to Table 1. What is true above the production process?
    A. Constant marginal product of labor.
    B. Diminishing marginal product of labor.
    C. Increasing returns to scale.
    D. Decreasing returns to scale.

33. If there are implicit cost of production, _____.
    A. accounting profit will exceed economic profit
    B. economic profit will always be zero
    C. economic profit will exceed accounting profit
    D. accounting profit will always be zero

34. Accounting profit is equal to total revenue minus _____.
    A. variable costs
    B. implicit costs
    C. the sum of implicit and explicit costs
    D. explicit costs

35. The marginal physical product (MPP) of a variable input is _____.
    A. total output divided by the quantity of the input used
    B. the change in total output that results from changing the fixed input by one unit
    C. the change in total cost divided by the change in quantity of output
    D. the change in total output that result from changing the variable input by one unit

Continued .....

36. Some monopolistically competitive firms may earn positive economic profits in the long run because of _____.
    A. product differentiation
    B. the products are homogeneous
    C. many buyers and sellers
    D. easy entry and exit

37. Resource allocative efficiency occurs when a firm _____.
    A. produces the quantity output at which price exceeds average total cost
    B. minimized costs of production but charges the highest possible price
    C. produces the quantity of output at which price equals marginal cost
    D. produces the quantity of output at which price equals average variable cost

38. According to the kinked demand curve theory, if a firm _____ its price, other firms will _____, but if the firm _____ its price, the other firms will _____.
    A. raises; also raise their prices; lowers; also lower their prices
    B. raises; lower their prices; lowers; lower their prices further
    C. lowers; also lower their prices; raises; not change their prices
    D. lowers; not change their prices; raises; also raise their prices

39. Minimum efficient scale refers to the _____.
    A. smallest plant size a firm can utilize and still maintain production
    B. lowest output level at which average total costs are minimized
    C. output level at which LRATC curve touches each SRATC curve
    D. output level with smallest plant size

40. The market demand curve in perfectly competitive market is _____.
    A. upward-sloping
    B. downward-sloping
    C. perfectly elastic
    D. perfectly inelastic

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SECTION 2: STRUCTURAL QUESTIONS

QUESTION 1

(a) Kimie decides to open her own restaurant using her RM250,000 personal savings that earned interest of RM7,500 per year. In order to do so, she quits from working as an account executive where she earned RM95,000 annually. She also cancels the rental contract worth RM35,000 per year to setup her own restaurant. Her estimated costs of running the restaurant are RM80,000 for equipment, RM55,000 for utilities, RM38,500 for supplies, and RM5,000 for internet services. At the end of the year, she estimates will make RM350,000 in total revenue.

(i) Find Kimie's accounting profit and economic profit. (6 marks)

(ii) Discuss whether Kimie should quit her job and start the restaurant. (3 marks)

(b)

Labour (unit)	**Total Product (TP)** (Unit)	**Marginal Product (MP)** (Unit)	**Total Variable Cost (TVC)** (RM)	**Total Cost (TC)** (RM)	**Average Total Cost (ATC)** (RM)	**Marginal Cost (MC)** (RM)
0	0	-	0	12	-	-
1	6	6	3			
2	15		6			
3	21		9			
4	24		12			
5	26		15			1.5

Based on the table above:

(i) Find the marginal product (MP) for each level of labor. (2 marks)

(ii) Express what is the total fixed cost (TFC) of this firm? (1 mark)

(iii) Find the total cost (TC), average total cost (ATC) and marginal cost (MC) for each level of product. (7 marks)

(iv) Find at which level of labor does diminishing marginal return set in? (1 mark)
[Total: 20 marks]

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QUESTION 2

(a) The table below shows the total cost and total revenue information for a firm.

Output (units)	Total Cost (TC) (RM)	Total Revenue (TR) (RM)
1	20	16
2	54	32
3	67	48
4	82	64
5	98	80
6	116	96
7	137	112

(i) Find the marginal cost (MC) and the marginal revenue (MR) for each level of output. (7 marks)

(ii) Based on answer in part (i), depict and justify the type of market structure this firm operates in and the price of the product sold. (3 marks)

(iii) Depict the output and profit maximization values for this firm. (4 marks)

(b) Tenaga Nasional Berhad (TNB), a Malaysian multinational electricity company is the only electric utility company in Peninsular Malaysia and also the largest publicly-listed power company in South-East Asia with RM99.03 billion worth of assets.

Discuss how TNB able to maintain its market power in the industry. (6 marks)
[Total: 20 marks]

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QUESTION 3

(a) In Malaysia, the term 'Mamak' refers to Tamil Muslims who generally are the owners of such restaurants. 'Mamak' restaurants are popular due to variety food and beverages they serve. Each 'Mamak' restaurant has its own specialties to attract and retain its customers. Most of the 'Mamak' food operators compete to open their branch or outlet in any new township and sell all types of food to supply their target market.

(i) Depict the type of market structure that the 'Mamak' restaurants are operating in. (1 mark)

(ii) Based on part (i), describe any THREE (3) characteristics of the market structure. (6 marks)

(iii) Explain the impact of this particular market structure on the welfare of society in terms of allocative efficiency and productive efficiency. (5 marks)

(b) Consider the following payoff matrix for duopoly, Company ABX and Company LTC.

ABX's Decision	LTC's Decision: High Price	LTC's Decision: Low Price
High Price	RM125 million profit for ABX RM130 million profit for LTC	RM 25 million profit for ABX RM105 million profit for LTC
Low Price	RM150 million profit for ABX RM140 million profit for LTC	RM110 million profit for ABX RM25 million profit for LTC

(i) Depict the dominant strategy for Company ABX and Company LTC, respectively. (2 marks)

(ii) Depict the profit for Company ABX and Company LTC at Nash equilibrium. (2 marks)

(iii) Based on the answer in part (i) and (ii), discuss whether Company ABX and Company LTC will benefit more from cooperation or from pursuing self-interested decision-making. (4 marks)

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